

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

Attachment No. 1

Page 1 of 2

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

Amend CSO Section 1714 as follows:

§1714. Hoisting and Erecting of Precast, Prefabricated ~~Panels~~ Concrete Construction (Other Than Tilt-Up Panels).

(a) An erection plan and procedure shall be prepared by, or under the direction of, a civil engineer currently registered in California (hereinafter referred to as the responsible engineer).

(1) The erection plan and procedure shall be available at the job site.

(2) Job site inspections shall be made by the responsible engineer, ~~(or an authorized representative,)~~ during the course of erection to ensure that the erection plan and procedures are followed.

(3) Any proposed field modifications shall be approved by the responsible engineer and added to the plan and procedure available at the job site.

(4) Precast member or vertical panel bracing shall be designed by, or under the direction of, and installed in accordance with the direction of, the responsible engineer.

(5) Lifting methods and procedures shall be such that employees are not at risk of being struck by the concrete member, panel or supporting equipment.

(b) ~~All attachments shown on the erection plan shall be installed before the panel lifting load line is released.~~ Lifting inserts, which are embedded or otherwise attached to precast concrete members, shall be capable of supporting at least four times the maximum intended load applied or transmitted to them, and shall be used in accordance with the manufacturer's recommendations.

(c) Lifting hardware shall be capable of supporting at least five times the maximum intended load applied or transmitted to the lifting hardware.

(d) Precast concrete members and structural framing shall be supported to prevent falling, overturning and collapse until the permanent connections specified in the erection plan are completed.

(e) ~~(e)~~ Adjustment of ~~panels~~ precast members, after initial placement, which requires the lifting of the ~~panel~~ members in any manner, shall not be made unless wire rope safety tie backs are used or the ~~panels~~ members are reattached to a load line.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

Attachment No. 1

Page 2 of 2

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

Amend CSO Section 1715 as follows:

§1715. ~~Precast Tilt-Up~~ Precast Tilt-Up Concrete Panel Construction, Including Tilt-Up.

(a) Concrete erection stresses, lifting point attachments and locations in tilt-up concrete panels shall be designed for expected loads, including impact, by, or under the direction of, a civil engineer currently registered in California (hereinafter referred to as the responsible engineer) ~~civil engineer for expected loads, including impact.~~

(b) Lifting inserts, which are embedded or otherwise attached to ~~tilt-up precast~~ concrete members, ~~other than the tilt-up members,~~ shall be capable of supporting at least ~~four~~ two times the maximum intended load applied or transmitted to them, and shall be used in accordance with the manufacturer's recommendations.

(c) Lifting hardware shall be capable of supporting at least five times the maximum intended load applied or transmitted to the lifting hardware.

(d) ~~Precast wall or V~~vertical panel bracing used to support the tilt-up panels prior to final bolting/attachment shall be designed by, or under the direction of, and installed in accordance with the direction of the responsible engineer, a currently registered civil engineer

(1) Bracing shall be designed to withstand, at a minimum, a wind load induced force of a 70 mile per hour wind, of at least 10 pounds per square foot. (See Appendix Plate B-5).

(2) (1) Prior to the commencement of panel erection, a detailed lifting and erection plans shall be prepared by, or under the direction of, the responsible engineer, a currently registered civil engineer. All panel erection shall be performed in accordance with the plan.

(3) The lifting and erection plans and procedures shall be available on the job site.

(4) Field modifications to the lifting plan shall be approved by the responsible engineer and added to the plans and procedures available at the job site.

(5) (2) Lifting methods and procedures shall be such that employees are not at risk conducted in such a manner as to ensure that in the event of lifting attachment failure, employees shall not be exposed to the hazard of being struck by the panel or other supporting equipment.

(e) Tilt-up wall panels shall be supported to prevent overturning, toppling and/or collapse until permanent connections are completed as specified in the erection plan.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.